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EXAMINER

NGUYEN, THONG Q

ART UNIT

PAPER NUMBER

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MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## **DETAILED ACTION**

### ***Response to Amendment***

1. The present Office action is made in response to the amendment filed on 6/16/2008. It is noted that in the amendment, applicant has made changes to the abstract, the specification and the claims. It is noted that applicant has submitted a substitute specification and its marked-up copy to show the changes to the specification.
2. Regarding to the claims, applicant has amended claims 1-4 and 8-9. There is not any claim being added or canceled from the application. The pending claims are claims 1-20 which claims are examined in this Office action.

### ***Specification***

3. The substitute specification filed on 6/16/2008 has not been entered because it does not conform to 37 CFR 1.125(b) and (c). In particular, while applicant has filed a substitute specification and its marked-up copy to show the changes to the specification; however, applicant has not filed a statement that the substitute specification does not include any new matter as required by 37 CFR 1.125(b).
4. Since the substitute specification has not been entered, thus the objections to the abstract and the specification as set forth in the previous Office action have been repeated. In other words, the abstract and the specification are objected for the following reasons.

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5. The abstract of the disclosure is objected to because of the following reasons: First, the abstract contains more than one paragraph, and Second, the abstract contains more than 150 words. Correction is required. See MPEP § 608.01(b).
6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The disclosure is objected to because of the following informalities: The specification is objected to because it does not have sufficient headlines to provide a clear framework of the specification. It is also noted that the specification does not have a Summary of the Invention and a Brief description of the Drawings, ... Appropriate correction is required.

***Claim Objections***

8. Claims 3 and 8 are objected to because of the following informalities.

Appropriate correction is required.

In each of claims 3 and 8: the terms "each include" (line 3 of each claim) should be changed to --each includes--.

***Claim Rejections - 35 USC § 103***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1, 3-7, 13, 15 and 17-18, as best as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshima et al (Pub. No. 2003/0174518) in view of Uchida et al (Pub. No. 2003/0179456) (both of record).

Toshima et al disclose a surface light source device. The surface light source device as described in paragraph [0061] and shown in fig. 5 comprises the following features: a) a light source (8) having a reflector (81) surrounding the light source on its back side; a light guide (5) having a light entrance surface (52) facing the light source and having an light emitting surface (51); a downward-facing prism sheet (6) having a prism surface facing the emitting surface of the light guide and a smooth surface opposite the downward-face prism surface; and a light diffusing element (1). Regarding to the light diffusing element, in paragraphs [0030] and [0057]-0060] and shown in fig. 3, Toshima et al disclose that the light diffusing element has a light diffusing surface and a roughed surface facing the smooth surface of the prism sheet. Regarding to the materials

of the light diffusing element, in paragraphs [0034]-[0037], Toshima et al disclose that the material of the light diffusing element is made by polymer materials.

The only feature missing from the light diffusing element as provided by Toshima et al is that they do not explicitly disclose that the smooth surface of the prism sheet comprises a comb polymer has a stem moiety and a branch moiety wherein the main component constituting the stem moiety is different from that constituting the branch moiety.

However, the use of a comb polymer having a stem moiety and a branch moiety wherein the main component constituting the stem moiety is different from that constituting the branch moiety for making an optical element so that its surface has an excellent surface smoothness is known to one skilled in the art as can be seen in the light diffusing element provided by Uchida et al. In particular, Uchida et al disclose a light diffusing element and teach the use of polymer materials selected from a combination of polymers which includes acrylic material and styrene material. See Uchida et al, paragraphs [0024]-[0033] and [0035]. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the light diffusing element and/or the prism sheet of the surface light source device as provided by Toshima et al by using a combination of polymer materials as suggested by Uchida et al for the purpose of increasing the smoothness of the flat/smooth surface of the diffusing element or the prism sheet.

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11. Claims 2, 8-12, 14, 16 and 19-20, as best as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshima et al (Pub. No. 2003/0174518) in view of Uchida et al (Pub. No. 2003/0179456).

Toshima et al disclose a surface light source device. The surface light source device as described in paragraph [0061] and shown in fig. 5 comprises the following features: a) a light source (8) having a reflector (81) surrounding the light source on its back side; a light guide (5) having a light entrance surface (52) facing the light source and having an light emitting surface (51); a downward-facing prism sheet (6) having a prism surface facing the emitting surface of the light guide and a smooth surface opposite the downward-face prism surface; and a light diffusing element (1). Regarding to the light diffusing element, in paragraphs [0030] and [0057]-0060] and shown in fig. 3, Toshima et al disclose that the light diffusing element has a light diffusing surface and a roughed surface facing the smooth surface of the prism sheet. Regarding to the materials of the light diffusing element, in paragraphs [0034]-[0037], Toshima et al disclose that the material of the light diffusing element is made by polymer materials. There are two things missing from the light diffusing element as provided by Toshima et al as follow: First, they do not explicitly disclose that the smooth surface of the prism sheet comprises a comb polymer has a stem moiety and a branch moiety wherein the main component constituting the stem moiety is different from that constituting the branch moiety; and Second, they do not

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disclose that the diffusing element has a smooth surface and the prism sheet has a roughed surface as claimed.

However, the use of a comb polymer having a stem moiety and a branch moiety wherein the main component constituting the stem moiety is different from that constituting the branch moiety for making an optical element so that its surface has an excellent surface smoothness is known to one skilled in the art as can be seen in the light diffusing element provided by Uchida et al. In particular, Uchida et al disclose a light diffusing element and teach the use of polymer materials selected from a combination of polymers which includes acrylic material and styrene material. See Uchida et al, paragraphs [0024]-[0033] and [0035]. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the light diffusing element and/or the prism sheet of the surface light source device as provided by Toshima et al by using a combination of polymer materials as suggested by Uchida et al for the purpose of increasing the smoothness of the flat/smooth surface of the diffusing element or the prism sheet.

Regarding to the second feature missing from the device provided by Toshima et al, it is noted that such a structure of the light diffusing element and the prism sheet as claimed is merely that of a preferred embodiment and no criticality has been disclosed. The support for that conclusion is found in the present specification in which applicant has clearly disclosed that the prism sheet has a smooth surface and the light diffusing element has a roughed surface. It is also



noted that the non-criticality of the arrangement of the smooth surface or the roughed surface on either the light diffusing element or the prism sheet is indeed claimed as can be seen in the present claim 1. It is also noted that it was decided in the Courts that an interchange in positions between two components/elements is within the level of one skilled in the art. Thus, absent any showing of criticality,, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined product as provided by Toshima et al and Uchida et al by rearranging the roughed surface on the prism sheet and the smooth surface on the light diffusing element for the purpose of satisfying a particular application.

### ***Response to Arguments***

12. Applicant's arguments filed on 6/16/08, pages 7-10, have been fully considered but they are not persuasive for the following reasons.

A) Regarding to the rejection of 1, 3-7, 13, 15 and 17-18 under 35 U.S.C. 103(a) as being unpatentable over Toshima et al (Pub. No. 2003/0174518) in view of Uchida et al (Pub. No. 2003/0179456), applicant's arguments provided in the amendment of 6/16/08, pages 7-8, have been fully considered but they are not persuasive.

Applicant has argued that the primary reference, Toshima et al, does not disclose the feature that the smooth surface has a smooth layer comprising at least a comb layer, and the secondary reference, Uchida et al, discloses a combination of polymers; however, the combinations of polymers are not necessary the same as a comb polymer

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as claimed. The examiner respectfully disagrees with the applicant's opinions for the following reasons.

a) Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

b) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In the present claims, the claims recite a comb polymer without any specific limitations related to the structure of the so-called "comb polymer". Applicant has also argued that the combinations of polymers as disclosed by Uchida et al are not necessary the same as a comb polymer or the copolymer is not the same thing as a comb polymer, see amendment, page 8, the second paragraph; however, applicant has failed to provide any written evidence to support for the applicant's arguments. A bare statement without any positively supported written evidence is not sufficient to overcome a rejection.

c) Regarding to the feature related to the comb polymer as claimed, applicant is respectfully invited to review the art of Uchida et al, paragraphs [0024]-[0033] and [0045]. In particular, in paragraph [0032], Uchida et al disclose that the resins used to form the diffusing layers are made by a first resin material in the

form of styrenic resin and a second resin material in the form of acrylic resin. The combinations of the first and second resins of the diffusing layer constitutes a comb polymer in the diffusing layer.

d) Regarding to the applicant's arguments that the rejection does not determine the status of claims 3-7, 13, 15 and 17-18, see amendment, page 7, paragraphs 6-7, the examiner respectfully disagrees and respectfully invited the applicant to review the rejection which the examiner has referred to paragraphs [0024]-[0033] and [0035] of the Uchida et al reference. In other words, the features recited in present claims 3-5 are disclosed in paragraph [0032], the feature recited in present claims 6, 15 and 17-18 is disclosed in paragraph [0033] and the feature recited in present claims 7 and 13 is disclosed by the primary reference, Toshima et al, in paragraph [0061] and shown in fig. 5.

B) Regarding to the rejection of 2, 8-12, 14, 16 and 19-20 under 35 U.S.C. 103(a) as being unpatentable over Toshima et al (Pub. No. 2003/0174518) in view of Uchida et al (Pub. No. 2003/0179456), applicant's arguments provided in the amendment of 6/16/08, pages 8-10, have been fully considered but they are not persuasive.

Applicant has argued that the primary reference, Toshima et al, does not disclose the feature that the smooth surface has a smooth layer comprising at least a comb layer, and the secondary reference, Uchida et al, discloses a combination of polymers; however, the combinations of polymers are not necessarily the same as a comb polymer

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as claimed. The examiner respectfully disagrees with the applicant's opinions for the following reasons.

a) Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

b) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In the present claims, the claims recite a comb polymer without any specific limitations related to the structure of the so-called "comb polymer". Applicant has also argued that the combinations of polymers as disclosed by Uchida et al are not necessary the same as a comb polymer or the copolymer is not the same thing as a comb polymer, see amendment, page 9, the second paragraph; however, applicant has failed to provide any written evidence to support for the applicant's arguments. A bare statement without any positively supported written evidence is not sufficient to overcome a rejection.

c) Regarding to the feature related to the comb polymer as claimed, applicant is respectfully invited to review the art of Uchida et al, paragraphs [0024]-[0033] and [0045]. In particular, in paragraph [0032], Uchida et al disclose that the resins used to form the diffusing layers are made by a first resin material in the

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form of styrenic resin and a second resin material in the form of acrylic resin. The combinations of the first and second resins of the diffusing layer constitutes a comb polymer in the diffusing layer.

d) Regarding to the applicant's arguments that applicant has a right to claim as many embodiments supported and enabled in the specification, the examiner respectfully agrees and the claims are examined. Applicant is respectfully invited to review the rejection of the claims in which the examiner has clearly disclosed the reason/support for the rejection. In particular, regard to the arrangement of the rough surfaces and the smooth surfaces as recited in present claim 2, the rejection has stated that the arrangement recited in present claim 2 is merely that of a preferred embodiment and no criticality has been disclosed. The support for that conclusion is found in the present specification in which applicant has clearly disclosed that the prism sheet has a smooth surface and the light diffusing element has a roughed surface. It is also noted that the non-criticality of the arrangement of the smooth surface or the roughed surface on either the light diffusing element or the prism sheet is indeed claimed as can be seen in the present claim 1. It is also noted that it was decided in the Courts that an interchange in positions between two components/elements is within the level of one skilled in the art. Applicant is respectfully invited to review the Decision made by the Courts in *In re Japikse*, 86 USPQ 70 (CCPA 1950). Thus, absent any showing of criticality, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined product as provided by

Toshima et al and Uchida et al by rearranging the roughed surface on the prism sheet and the smooth surface on the light diffusing element for the purpose of satisfying a particular application.

Applicant has also argued that the optical properties may be affected by a change in position of elements, see amendment, page 10; however, the present claims has not recited any features related to the so-called "the optical properties may be affected by a change in position of elements".

e) Regarding to the applicant's arguments that the rejection does not determine the status of claims 8-12, 14, 16 and 19-20, see amendment, page 8, the examiner respectfully disagrees and respectfully invited the applicant to review the rejection which the examiner has referred to paragraphs [0024]-[0033] and [0035] of the Uchida et al reference. In other words, the features recited in present claims 8-10 are disclosed in paragraph [0032], the feature recited in present claims 11, 16 and 19-20 is disclosed in paragraph [0033] and the feature recited in present claims 12 and 14 is disclosed by the primary reference, Toshima et al, in paragraph [0061] and shown in fig. 5.

### ***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thong Nguyen/

Primary Examiner, Art Unit 2872